THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Vincent P. Stanton, Jr.

: 1655

's Docket No.: 11926-015001

Serial No.: 09/658,659

Art Unit

Examiner: A. Chakrabarti

TECH CENTER 1600/2900

Filed Title

September 8, 2000

: GENE SEQUENCE VARIANCE IN GENES RELATED TO FOLATE

METABOLISM HAVING UTILITY IN DETERMINING THE TREATMENT OF

DISEASE

Commissioner for Patents Washington, D.C. 20231

RESPONSE TO RESTRICTION REQUIREMENT

Responsive to the action mailed April 20, 2001, applicant elects the invention of Group XV, claims 171-181, drawn to nucleic acid molecules related to SEQ ID NO:15. Applicant does not understand the requirement that a single sequence be elected. If the Examiner is requesting that only one of (a)-(h) in claim 171 be elected, Applicant traverses the requirement.

The Examiner status that the requirement was imposed in accordance with MPEP 803.04, which states that "nucleotide sequences encoding different proteins are structurally distinct and are unrelated to one another." SEQ ID NO:15 is the human methylenetetrahydrofolate reductase (MTHFR) gene. Each of (a)-(h) in claim 171 represents a single nucleotide polymorphism in the MTHFR gene. Thus, (a)-(h) in claim 171 are not unrelated to each other. Each represents a single nucleotide variation in the same gene encoding the same protein (albeit with any amino acid alteration caused by the polymorphisms). They do not represent eight different proteins as the Examiner appears to suggest. Rather, they represent eight single nucleotide changes in a single gene. In fact, as Table 10 reveals, only two of these eight single nucleotide polymorphisms even cause a change in the amino acid sequence of human methylenetetrahydrofolate reductase.

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

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In view of the foregoing, Applicant respectfully requests that the Examiner reconsider and withdraw this requirement.

A Petition for Extension of Time with the appropriate fee is enclosed. Please apply any charges or credits to Deposit Account No. 06-1050.

Amta L. Meiklejohn, Ph.D.

Respectfully submitted,

Reg No. 35,283/

Date: [1 89t 200

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